



BRIEFING

Overheads, infrastructure and science services in the new funding system

Date:	7 August 2025	Priority:	High
Security classification:	In Confidence	Tracking number:	0017004

Action sought		
	Action sought	Deadline
Hon Dr Shane Reti Minister of Science, Innovation and Technology	Agree to approach to institutional funding, including how the system fully funds the cost of science services and research infrastructure	11 August 2025

Contact for telephone discussion (if required)				
Name	Position	Telephone		1st contact
Landon McMillan	Policy Director, Science & Space	04 978 3448	Privacy of natural persons	✓
Dr Nic Scott	Principal Policy Advisor, Science Sector Policy			

The following departments/agencies have been consulted

Minister's office to complete:

☐ Approved

☐ Declined

☐ Noted

☐ Needs change

☐ Seen

☐ Overtaken by Events

☐ See Minister's Notes

☐ Withdrawn

Comments



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Purpose

To provide advice on an approach to designing new institutional funding mechanisms, including for overheads, critical science services and infrastructure; the appropriate timing for changes to these aspects of the funding system; and the transition of the Strategic Science Investment Fund.

Executive summary

This briefing outlines the third phase of reforms to the Science, Innovation & Technology (SI&T) funding system, aimed at creating a more strategically driven funding model. Key decisions have been made to consolidate final funding decisions under Research Funding New Zealand (RFNZ), guided by advice on priorities and allocations made by the PMSITAC and structured around domain-based pillars. The new system will use System Investment Plans and Pillar Investment Plans to align funding with national priorities. Confidential advice to Government

We also recommend that paper outline how public research institution financial viability will be maintained in the new system. This includes outlining when and how decisions on the funding mechanisms for infrastructure, databases and critical science services will be taken. Your Ministerial colleagues will have a significant interest in these services where they support public good activities or are depended upon by government agencies in other portfolios.

While in principle, New Zealand operates a full cost funding system for science, in practice, funding has not kept pace with the rising cost of science, leading to funding gaps. Research organisations have had to manage these funding gaps through cross-subsidisation, and where reallocation across the system occurs, these practices will increasingly come under strain. Cross-subsidisation, often through overheads, distorts price signals and obscures the true cost of science services and research. This leads to suboptimal allocation of resources and dilutes the ability to strategically direct science funding. Perceptions of low value for money by users (including government) also jeopardises uptake and the potential for co-investment.

Disentangling and attributing costs to specific uses is difficult, so we do not know the size and main drivers of cross-subsidisation. Effective reform of institutional funding will need to be informed by detailed cost information sourced directly from research organisations.

We recommended taking a phased approach, beginning with the disclosure of detailed cost information and using this information to reaffirm a full cost funding strategy, but with expectations rightsized (prioritised) to match funding envelopes. This will facilitate the design of new institutional funding mechanisms and funding mechanisms for infrastructure, including databases.

We propose a timeframe which enables the information to be gathered in time to meet the development of the Pillar Investment Plans; the design of new institutional funding mechanisms; Confidential advice to Government

Recommended actions

The Ministry of Business, Innovation and Employment recommends that you:

- a **Note** that, in principle, New Zealand operates a full cost funding system for science and research, however, in practice, funding from MBIE and other government agencies has not kept pace with the rising cost of science delivery, resulting in funding gaps. *Noted*
- b **Note** that research organisations have had no choice but to manage these funding gaps themselves through cross-subsidisation, requiring inappropriately high overheads to shift the cost of unfunded or underfunded services to other revenue streams. *Noted*
- c **Note** that developing solutions will require understanding organisational cost and revenue allocation models and buy-in from Ministerial portfolios that are significant purchasers and users of science. This is best done after system priorities have been set and the new CRIs have been given time to fully integrate. *Noted*
- d **Agree** to a phased approach consisting of cost information disclosure followed by institutional funding model development (with agencies and research organisations) with implementation of solutions as part of pillar investment plans *Confidential advice to Government* *Agree / Disagree*
- e **Note** that MBIE will provide you with high-level information on the cost of environmental data provision, based on our understanding from those activities we directly fund or have previously reviewed for other purposes. Detailed data on the wider set of data and services will only become available through our proposed cost information disclosure approach. *Noted*
- f **Agree** to prioritise collecting information on the cost of delivery for existing science data related to flood-mapping, that the Ministry for the Environment has identified as their highest priority, per their Cabinet paper on development of a national flood map as part of the National Adaptation Framework. *Agree / Disagree*
- g **Agree** that Strategic Science Investment Funding for research infrastructure, including the Nationally Significant Collections and Databases, maintain its scope and quantum until the development of pillar investment plans from *Confidential advice to Government* *Agree / Disagree*



Landon McMillan
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Labour, Science and Enterprise, MBIE

07 / 08 / 2025

Hon Dr Shane Reti
Minister of Science, Innovation and Technology

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Background


1. This is the third paper in a series of briefing notes on the design and operations of the SI&T funding system. It gives effect to the outcomes sought through the reforms, leading up to the drafting of a SI&T funding Cabinet paper for consideration by Cabinet in September.
2. Previous briefings sought your agreement to the overall framework; design and role of decision makers (*briefing 0016551* refers); the scope of funds included; and transition pathway (*briefing 0017002*) for the new system.

Summary of your decisions so far


3. You have agreed to a SIT funding system that is more consolidated and strategically driven around identified priorities that lift economic outcomes and the use of advanced technology. Key decisions you have already taken are:
 - Adopting a domain-based pillar system that facilitates strategic choices around the allocation of funding across pillars, and the development of a System Investment Plan (SIP) that gives effect to the advice of the Prime Minister's SI&T Advisory Council (PMSITAC) on how funding shifts across these pillars and instruments.
 - Establishing a single funding decision-maker, Research Funding New Zealand (RFNZ), that makes operational decisions on funding awards and processes, consolidating responsibility for funds that is currently fragmented across multiple bodies.
 - The development of Pillar Investment Plan (PIP), drawing on advice from the PMSITAC and the expertise of RFNZ, that will detail how each pillar will use a mix of funding instruments to meet desired outcomes.
 - A transition plan that sees the PMSITAC map the full landscape of science funding to pillars immediately, followed by a sequenced transition of funding to the RFNZ for decision over a three-year period, starting with the Endeavour and Marsden funds.
 - Extension of the Crown Research Institute (CRI) Strategic Science Investment Fund (SSIF) programmes contracts Confidential advice to Government to give funding certainty to the newly amalgamated CRIs as they transition to Public Research Organisations (PROs).
4. We regard the main decisions for the funding model Cabinet paper to have been made, except for a decision on the Health Research Council that we will provide you with advice on next week.
5. However, we recommend the paper set out for your colleagues how the funding system will continue to support the institutional viability of PROs, including the funding of research infrastructure, critical science services and databases relied on by user agencies in other Ministerial portfolios.

Changes to institutional funding should follow once initial changes are imbedded

6. The most challenging aspect of transitioning to a new funding system will be how we ensure research institutions effectively deliver system priorities while maintaining financial viability – particularly if we are reallocating funding across pillars or horizontal instruments. Research organisations already face financial challenges due to the gap between government's delivery expectations and their available revenue.
7. While important for the long-term success of the reforms, changes to institutional funding are not required for the establishment phase of a more strategy-driven system. We recommend allowing the system to adapt to the CRI amalgamations, the introduction of the pillar-based organising framework and new system priorities before initiating further changes.

8. Confidential advice to Government
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Our full-cost funding system does not cover the full cost of research

9. Science, innovation and technology (SI&T) portfolio funding is based on the principle of full-cost funding – when purchasing science outcomes government will fund both the direct and indirect costs of research or science services.
10. **We see no immediate reason to change the full cost funding model.** When operating effectively, the model promotes transparency and financial sustainability for research organisations, while allowing funding signals to direct resources to priority areas. This is consistent with international practice in the UK and USA (see **Annex Two**).
11. However, there are many areas where SI&T funding for a project or service **does not cover the full cost of delivery**. While this affects all research organisations, it is a particular challenge for CRIs which are expected to provide science, infrastructure, data and services for a public good purpose.
12. Commercial Information
- 
13. Other purchasers, including government agencies, international funders and the private sector are often unwilling to fund the full costs of science services or research, perceiving those costs to be unreasonably high because i) providers cannot clearly justify the cost of a specific project, and ii) there is an erroneous expectation that SI&T funding already covers the indirect costs of research organisations so science services should be low cost to users.
14. The only option available to research organisations is to cover these unmet costs through cross-subsidisation. Universities have been able to partially meet these costs through the Performance Based Research Fund and subsidies from their tuition revenue. CRIs, with more limited revenue opportunities, have been forced to pass these costs on to other revenue streams as high institutional overheads.

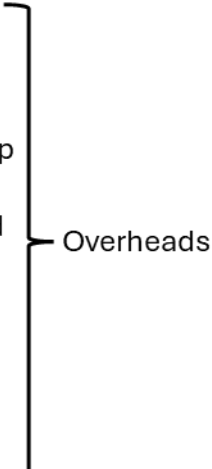
Inappropriately high overheads make prioritisation ineffective

15. Overheads absorb a proportion of new or reprioritised funding, directing resources away from priority areas towards things we are not actively choosing to fund.
16. When overheads become too high a portion of total costs, they make prioritisation ineffective by redirecting funding from explicit system priorities to meet the unfunded expectations on institutions. In effect, high overheads devolve priority setting from funders to institutions – in economic terms this is a prime example of mispricing. This directly runs counter to the key objective of having a strategically driven funding system.
17. Unlike other full cost funding systems (eg the UK and USA), New Zealand does not require the disclosure of indirect costs. Without this information it is impossible to assess whether overhead rates are appropriate for the cost of delivering science.
18. Importantly, it also means **we do not have the information needed** to design appropriate institutional funding mechanisms as we cannot identify the scope or scale of the costs to be

funded. We cannot, for example, allocate an envelope of funding to cover databases and critical science services without understanding the cost of delivering these services.

We lack detailed information on the drivers of organisational overheads


19. The full cost of research can be broken down into three distinct components:

- a. **Directly incurred costs** – resources directly consumed by the activity, including researcher and technical staff time, materials, subcontracted services and travel.
 - b. **Directly allocated costs** – resources attributable to an activity but used across an organisation, including shared facilities, research management and reporting, professional functions like commercialisation, partnership or legal expertise.
 - c. **Indirect costs** – institutional costs that would be incurred with or without the activity:
 - i. **Back-office functions** – corporate functions, leadership, utilities and administration facilities.
 - ii. **Cross-subsidisation** – institutional costs arising from the need to cover the costs of unfunded or underfunded expectations.
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20. Where overheads are standard or provide flexibility to manage short-term variability in costs or revenue, we see no issues, but they can mask system-level failures to right-size expectations to match available funding.

21. Excessively high overheads can arise from excessive back-office costs (*inefficiency*), costs passed on from underfunded activities (*unfunded mandates*) or from maintaining underutilised capabilities that are not (or are only partially) required by priority activities. Research organisations must make sufficient return to meet their capital expenditure needs, which can also contribute to excessive overhead charges.

22. Confidential advice to Government



How MBIE funds research organisations makes these issues worse

23. MBIE's funding approach to science services has contributed to the challenges faced by research organisations. Strategic Science Investment Fund (SSIF) contracts tightly prescribe funding to specific purposes, but often without covering the full cost of delivery.

24. The main problem is that **expectations have outstripped available dedicated funding**, and once a piece of infrastructure, collection or database has been started the system has found it very hard to agree to deprioritise or stop it.

25. Periodic attempts to estimate these funding gaps and seek agreement on priorities and or alternative funding solutions with other agencies have fallen short. This has resulted in inconsistent expectations and coordination failures across the system. A lack of a shared understanding of cost structures has made it difficult to reach agreement, or even to recognise the full extent of the problem.

26. Balancing clear funding direction with CRI autonomy adds to the problem, as CRIs must independently allocate resources and make investment decisions. CRIs have increasingly

leveraged SSIF funds to cover shortfalls. The issue also impacts CRIs' capacity to develop capital plans, retain revenue, and invest in infrastructure¹.

27. Improving how we fund research infrastructure and critical science services are the two areas likely to have the greatest impact on mitigating these issues and reducing unfunded mandates.

Government is not fully funding the science services it purchases

28. Critical science services (CSS) usually support long-term national needs independent of government priorities or support a wide range of research areas. For example, GeoNet supports both government's emergency hazard response and longer-term land use and risk management policy development.
29. CSS include the provision of information (data and collections), advice and models based off the information, or lab services. Attributing costs to specific uses is challenging because infrastructure and capabilities support multiple outcomes, while science data serves as both inputs and outputs across various research areas. Costs are met from diverse sources including research grants, infrastructure funding, and overheads from unrelated projects or commercial services.
30. There are several challenges that surround CSS, briefly summarised as follows:
- **Coordination issues** – there's a lack of clarity around who is responsible for funding and stewardship of CSS. Agencies have high expectations but limited funding, and outside the NSCDs there are no SI&T funds specifically for CSS.
 - **Sustainable funding** – CSS are often underfunded, with costs hidden in overheads. This distorts delivery and reduces uptake of public good science. In the current fiscal environment, choices will have to be made or alternative funding mechanisms found.
 - **We don't know the size of the problem** – it's hard to allocate unit costs. Funding comes from multiple sources and cross-subsidisation occurs. New priorities are emerging from agencies² and there may be other services we are unaware of.
 - **Overheads** – unfunded mandates on CRIs for CSS inflate overheads, which can skew outcomes and lead to suboptimal resource allocation.
31. The clearest example of underfunded CSS are the NSCDs. Developing a funding solution for NSCDs would act as a prototype model for other, less pressing or less clearly defined CSS.
32. Confidential advice to Government

Rationalising research infrastructure investment

33. Compared with other countries, New Zealand has very little direct funding for research infrastructure (RI). Under the full cost funding model, RI costs are covered by overheads or directly allocated to research programmes or science services contracts. This contributes to high overheads and pressure on research organisations to deliver unfunded mandates.

¹ We are requiring the new PROs to meet more stringent requirements for adequate revenue sources to meet lifecycle costs of capital. This will make trade-offs around maintaining capital more explicit.

² For example: new geomagnetic data for space weather monitoring (MBIE Energy and NEMA), open access to geothermal data and monitoring (Resources/Geothermal strategy).

34. Government supports large-scale RI with high national benefits through SSIF (~\$64m per year) and access to specific international research facilities through the Catalyst Fund.
35. Research organisations are expected to invest in and manage the majority of RI themselves. This means that most RI decisions are taken in the context of organisational priorities, not system priorities and NZ Inc benefit. There is a long-running concern that New Zealand is not efficiently leveraging collective investment in RI to drive for NZ Inc benefit.
36. We recommend that future RI investment be guided by an RI roadmap, a mechanism commonly used in other countries. This would allow Government, the SI&T sector and interested private partners to come together and develop a joint RI plan that sets out priorities to guide investment and access models.
37. You have already signalled your expectation of greater collaboration on infrastructure to both universities and CRIs. Processes already underway will further support information sharing and coordination of RI, including:
 - the CRI mergers, which will require boards to rationalise their infrastructure holdings
 - the University and CRI collaboration agreement, which will cover infrastructure collaboration, and broader signals in the upcoming Tertiary Education Strategy
 - the Kitmap project, which will provide greater visibility of the current RI portfolio.
38. There is a strong case for ongoing government support of national RI. We recommend that SSIF infrastructure funding stays unchanged until the roadmap is developed. The government could also consider increasing RI funding to align with priorities or promote joint investment, as seen internationally. We will provide further advice on RI funding options as we work with you to finalise the SI&T funding model.

Giving confidence that other portfolio's science needs will be met

39. We recommend that the funding model Cabinet paper, intended for Cabinet consideration in September, set out an overall approach to institutional funding, including how decisions around the funding and provision of critical science services will be made. The steps in this approach are summarised below:
 - i. **Start by improving transparency.** We need better information on the size of the problem. This will inform how we approach further fund design and allocation issues. Transparency is key to helping us build trust with science users, demonstrate impact, and direct funding to strategic uses.
 - ii. **Commit to the full cost funding strategy:** Better information will enable us to recommit to a full cost funding strategy – one that is properly funded and appropriately manages system expectations on research organisations.
 - iii. **Design new institutional funding:** We can then consider suitable options on what to do with SSIF CRI platforms and the nationally significant collections and databases. Depending on 1 above, we think we should:
 - iv. Confidential advice to Government
 - v. Confidential advice to Government

vi. Confidential advice to Government

40. Confidential advice to Government

We need to work with research organisations to get better information

41. We propose a phased, collaborative approach to cost information disclosure and analysis. This plan is designed to support the development of a more equitable, evidence-based funding model and to align with international practices (eg TRAC in the UK, F&A in the USA).
42. Due to the extent of cross-subsidisation and the interdependences of, and difficulty untangling the costs of infrastructure, capability, data, critical science services and research, we will need to work with research organisations to better understand their costing and allocation models.
43. CRIs have indicated they can provide high-level breakdowns of the organisational costs and how these contribute to overheads, but they are unlikely to be able to provide detailed breakdowns (or unit costs) without additional work. There may also be commercial sensitivity considerations that limit the extent of information they can disclose. We anticipate that all eight universities will be well-placed to contribute data on their research costs given their generally robust cost allocation processes.
44. The approach consists of three phases (described in more detail in **Annex One**):
 - *Phase 1 (Q3 2025)* - engaging with sector stakeholders to co-develop clear cost disclosure frameworks and identify main cost drivers, including CSS and RI.
 - *Phase 2 (Q4 2025 – Q1 2026)* - collecting and analysing standardised cost data from participating organisations to uncover cost structures, allocation methods, and cross-subsidisation.
 - *Phase 3 (Q2 2026 onwards)* - using these insights to inform evidence-based policy and funding model development, ensuring future science infrastructure and service investments are strategically prioritised and aligned with sector changes.

Agencies are working on funding for environmental science data and collections

45. As part of the National Adaptation Framework, the Ministry for the Environment (MfE) want to develop a sustainable funding model to support the provision of CSS and datasets required for climate adaptation and natural hazard management.
46. Separately, in early July you requested additional information on the cost of public good environmental data collection.
47. We will provide you with a weekly report item outlining our current understanding of the costs of public good environmental data. While we have good information in specific areas (eg weather data from the NIWA/MetService acquisition due-diligence process, geohazard data from the GeoNet Budget bid development), our information on wider costs is limited.
48. Our proposed cost information disclosure process will provide this wider information you have requested and would also serve as an essential input into MfE's work to develop a

funding model for environmental data for the National Adaptation Framework. Due to commercial considerations, we may not be able to disclose all information to MfE.

49. Information about the cost of delivery of environmental data could be prioritised as part of the first phase of our proposed approach (see **Annex One**). Confidential advice to Government

[Redacted]

50. Confidential advice to Government

[Redacted]

Next steps

51. MBIE will work with your office to prepare a science funding Cabinet paper, with the intention that this is considered at ECO on 17 September. We note that timeframes for development and consultation to meet this deadline are extremely tight.
52. Subject to your agreement, we will begin detailed discussions with finance leaders in the CRIs, universities and independent research organisations to understand the extent of available information and agree on a framework for the disclosure of cost information. We will provide you with updates and advice on institutional funding model options as part of the development process for the Pillar Investment Plans.
53. MBIE will provide you with an update in the weekly report on our current state of knowledge about the costs of provision of environmental datasets. We will work with MfE to provide you and the joint environment group of Ministers with an overview of the work programme to fund and deliver the essential science data needed to support a national flood map as part of the National Adaptation Framework.

Annexes

Annex One: Summary of proposed approach and timeline of relevant reform milestones

Annex Two: Overview of indirect cost funding in UK, USA and Australia

Annex One: Summary of proposed approach and timeline of relevant reform milestones

Confidential advice to Government



Annex Two: Overview of indirect cost funding in UK, USA, Australia and Ireland

	UK	USA	Australia	Ireland
Features	<p>Indirect costs funded through government project grants and contract research</p> <p>Uses sector-wide Transparent Approach to Costings (TRAC) methodology</p> <p>All research organisations submit annual costing returns</p> <p>Applies to universities only</p>	<p>Indirect costs funded through government project grants and contract research.</p> <p>Federal government negotiates rates with research organisations using set Facilities & Administration (F&A) rules</p> <p>Rates typically around 50% of direct costs, renegotiated every 4-6 years</p> <p>Applies to universities only</p>	<p>Indirect costs funded through direct appropriation (PROs) or block funding (universities)</p> <p>Fixed pool of funding for indirect costs which has shrunk as a proportion of research income over time</p> <p>Applies to universities and independent research organisations, but not public research organisations</p>	<p>Indirect costs funded through combination of project grants and institutional block funding</p> <p>Block funding allocated by formula, though some can be withheld if performance targets not met</p> <p>Applies to all research organisations</p>
Differences from New Zealand	<p>High transparency over costs through annual returns and frequent audits</p> <p>High administrative burden on sector to perform full-cost accounting</p> <p>Agreed sector-wide method for calculating full costs</p> <p>Technical staff functions covered by direct costs</p> <p>Government grants fund 80% of indirect costs – universities expected to cover the gap</p>	<p>High transparency over costs through negotiation process</p> <p>Negotiated process for agreeing indirect cost rates on a per institution basis</p> <p>Can include different rates for different types of research – eg lab-based vs field work vs desk research</p> <p>Cap on the administration component (eg corporate functions) as 26% of direct costs, no cap on facilities component</p>	<p>No transparency over indirect costs</p> <p>Grants cover only direct costs</p> <p>Indirect cost funding allocated at institution rather than project level</p>	<p>Limited transparency over indirect costs through block grant process</p> <p>Project grants cover (up to) 35% of indirect costs. Assumption that remainder is met by block grants</p>